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AN INTERESTING PTEROSTICHUS AND A NEW COLPODES FROM ARIZONA (COLEOPTERA: CARABIDAE)

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The following two fine species of Carabidae have been lent me for study by Mr. H. C. Fall. Both were taken in the Baboquivari Mts., extreme southern Arizona, about the middle of the state from east to west, by the late Mr. O. C. Poling.

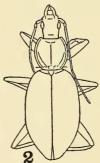
Pterostichus (Ithytolus) arizonicus Schffr. (fig. 1).

Schaeffer 1910, Sci. Bull. Mus. Brooklyn. Inst. Arts Sci. 1, 393.

Casey 1913, Memoirs 4, 129.

Redescription: Form as figured, moderately convex; brownish piceous, appendages slightly more rufescent; upper surface finely and lightly alutaceous, moderately shining. Head moderately elongate; eyes not very prominent; mandibles moderately elongate and arcuate, not striate, without bristle in scrobe; front with 2 strong, linear, slightly arcuate longitudinal impressions; 2 setae over each eye; ligula narrow basally, expanded at extreme apex, bisetose, not carinate; mentum tooth rather small, emarginate at apex; antennae moderate, 3rd segment (by measurement) about 3 times as long as greatest width, 2nd about one-half length 3rd, 1st slightly shorter than 3rd, somewhat stouter, first 3 segments glabrous, outer ones somewhat flattened; palpi moderately elongate, slender with subapical segment about equal to apical, bisetose in front. Prothorax with side margins fine, each with seta at base and





one-third from apex; no basal nor apical margins; single linear basal fovea each side; middle groove fine, transverse impressions practically obsolete; surface of disk moderately convex. not punctate, faintly transversely wrinkled near middle. Elytra with humeri moderate; humeral margin distinctly, though a little obtusely, angulate, not dentate; margin only faintly sinuate before apex (seen from above) but with strong internal plica; apices conjointly moderately rounded, sutural angles about right, not dentate; striae fine on disk, deeper apically, impunctate; no scutellar stria but an ocellate puncture at extreme base 2nd interval; intervals nearly flat on disk, without dorsal punctures. Metepisterna moderately elongate, much narrowed posteriorly; inner wings well developed. Prosternum margined at apex. Front of mesosternum and first ventral segment with light punctuation; lower surface otherwise impunctate. Middle and hind tibiae sulcate externally, rather spiny; first 3 segments middle and hind tarsi sulcate each side above; 4th tarsal segment not dilated, only slightly emarginate; tarsi sparsely pubescent above, first 4 joints middle and hind tarsi with rather densely pubescent soles. Male with front tarsi moderately dilated, segments not distinctly oblique, first 3 biseriately squamulose below; last vernal with I setigerous puncture each side near apex. Length 10; width 3.8 mm.

Arizona: Tucson (type, U. S. N. M.) and Baboquivari Mts. (Poling collector, collection H. C. Fall). My description has been drawn from the second specimen, which, however, I have compared

with the type. Schaeffer was seriously in error in referring this species to Gastrellarius. There is a certain superficial similarity, but Gastrellarius contains only species with vestigial inner wings (a character not of itself of much importance) and relatively short and broad metepisterna, with tarsi not pubescent above and middle of soles also naked, and with mentum tooth entire. There are other differences, but they need not be listed. Casey placed the species (which he evidently did not know) "provisionally" in Leptoferonia, but this is no more fortunate, for *Leptoferonia* is another group with short, broad metepisterna, and with tarsi naked above and on middle of soles, and has a very different appearance. In my opinion, arizonicus does not belong to any subgenus or group previously known from the United States, but to Ithytolus Bates (now called a subgenus of Pterostichus) of Guatemala and southern Mexico. Arizonicus has about the same appearance as the species of Ithytolus, to judge from the figure of I. anomalus Bates in Biologia (Pl. 13, fig. 15), an appearance almost as suggestive of certain Agoni as of Pterostichus. The exceptionally strong internal fold of the elytra, the hairy tarsi, and the full inner wings agree with Ithytolus. On the other hand arizonicus lacks the broad 4th tarsal joint of typical Ithytolus and differs somewhat in other ways. Apparently only 3 specimens (2 species) of Ithytolus have been known all QQ. I have seen none.

Colpodes falli n. sp. (fig. 2).

Form as figured, moderately convex; dark blue above, slightly purplish, especially on elytra; lightly alutaceous, especially on elytra; lower surface and appendages piceous black. Head elongate: eves not very prominent: 2 setae over each eye; front bi-impressed anteriorly; mentum tooth strong, rounded-acute; antennae very slender, 3rd segment 8 or 9 times long as wide. Prothorax with moderate, explanate side margins; seta each side at base but none anteriorly; basal foveae moderate, rounded; sides of disk (inside margin) slightly depressed from foveae to in front of middle; disk slightly convex, middle groove narrow but well impressed except at extreme base and apex; basal and apical transverse impressions less well defined; surface finely, transversely reticulate-wrinkled, lightly punctate in basal foveae. Elytra with humeri slightly narrowed, humeral marginal line obtusely angulate; side margins slightly sinuate near apex; apices not much produced, conjointly rather narrowly rounded; sutural angles finely denticulate; striae fine, very faintly punctulate; intervals nearly flat, 3rd 3-punctate, 1st puncture nearly on 3rd striae about 1/6 from base, 2nd and 3rd nearly on 2nd stria near middle and one-fourth from apex. Metepisterna elongate but not strongly so; inner wings apparently vestigial, possibly dimorphic. Tibiae strongly sulcate on outer edge; basal segment of front and first 3 segments of middle and hind tarsi rather strongly sulcate each side above; 4th segment all tarsi rather deeply emarginate, but with outer lobe no longer than inner. Male front tarsi narrowly dilated, first 4 segments biseriately squamulose; last ventral with I setigerous puncture each side near apex. Length 15; width

Type &, Baboquivari Mts., Arizona, April, 1924, Poling collector; unique, in collection H. C. Fall.

This is only the third *Colbodes* to be known north of Mexico. not counting Anchomenus marginatus Lec. (cf. Chaudoir, 1859, Ann. Soc. Ent. France 3 (7), 328), which seems out of place in this genus. From C. longiceps Schffr. (1910, Sci. Bull. Mus. Brooklyn Inst. Arts Sci. 1, 394; Casey, 1920, Memoirs 9, 29) of the Huachuca Mts., Arizona, falli differs (from description) in larger size, shallow rather than deeply elytral striae, less prominent eyes, noncordate prothorax, and in having I instead of 4 setae each side of last ventral. C. rufiventris Van Dyke (1926, Pan-Pacific Ent. 2, 120) of Mt. Washington, Arizona (also known to me only from description) is nigropiceous with rufous elytral margins, and is only 10.5 mm. long. None of these species seems to be the same as any of the 150 or so species of Colpodes of Mexico and Central Amer-It is a characteristic of this great, nearly tropicopolitan genus that many of the species are flightless and confined to single mountains or isolated mountain ranges, as the Arizona species seem to he.

Termites and the Drought.—The present drought recalls my experience with termites during the drought of 1930. In 1929 I discovered termites in the wooden foundation of my home. They were alive and quite numerous in the places that I had torn open. In 1931, when I replaced the wooden portion of the foundation with concrete, I was very much surprised to find that there were no termites in the old galleries, nor was there evidence of any recent activity. I concluded, therefore, that the severe drought of the year before (1930) had played havoc with them. Since it is necessary for termites to have a moist subterranean environment, it is quite likely that periods of drought act as a natural check to their increase. Specimens taken about my premises have been identified by Mr. T. E. Snider as Reticulitermes flavipes Kohl, and it is quite likely that those referred to above are of the same species.—Phil Rau, Kirkwood, Mo.